

31. (previously amended) The method of claim 30 wherein said signals are measured as the relative ion abundance.

32. (original) The method of claim 30 wherein said sub-set comprises from about 2 to about 8 member compounds.

claim 33 cancelled.

34. (previously amended) The method of claim 30 wherein said group of compounds comprises a collection library of diverse compounds selected from a historical repository of compounds, a collection of natural products, a collection of drug substances, a collection of intermediates produced in forming drug substances, a collection of dye stuffs, a commercial collection of chemical substances or a combinatorial library of related compounds.

35. (previously amended) The method of claim 34 wherein said collection library of diverse compounds comprises a library of compounds having from 2 to about 100,000 members.

36. (original) The method of claim 30 further including storing the relative abundance and stoichiometry of said complexes of said member compounds and said target in a relational database.

37. (previously amended) The method of claim 36 further including cross-indexing said relative abundance and stoichiometry of said complexes to the structures of said member compounds.

38. (original) The method of claim 30 wherein each of the members of said group of compounds, independently, has a molecular mass less than about 1000 Daltons and has fewer than 15 rotatable bonds.

39. (original) The method of claim 30 wherein each of the members of said group of compounds, independently, has a molecular mass less than about 600 Daltons and has fewer than 8 rotatable bonds.

40. (previously amended) The method of claim 30 wherein each of the members of said group of compounds, independently, has a molecular mass less than about 200 Daltons, has fewer than 4 rotatable bonds, or has no more than one sulfur, phosphorous or halogen atom.

41. (original) The method of claim 30 wherein said mass spectrometer is an electrospray mass spectrometer.

42. (original) The method of claim 30 wherein said target molecule is a RNA, a protein, a RNA-DNA duplex, a DNA duplex, a polysaccharide, a phospholipid or a glycolipid.

43. (original) The method of claim 30 wherein said target molecule is RNA.

44. (previously amended) The method of claim 30 wherein said target molecule is RNA and said baseline affinity expressed as a dissociation constant is about 50 millimolar.

45. (original) The method of claim 30 wherein said target molecule is RNA and said standard ligand is ammonium.

46. (currently amended) The method of claim 30 wherein said electrospray mass spectrometer includes a desolvation capillary and a lens element; and
said adjustment of said mass spectrometer desolvation conditions—operating performance conditions includes adjustment of the voltage across said capillary and said lens element.

Claims 47-120 cancelled.

REMARKS

Status of the Claims

Claims 30-32 and 34-46 are pending in this application. Upon entry of the foregoing amendment, claims 30 and 46 will have been amended. Support for the amendments can be found in the specification on page 11 line 29 through page 12 line 15.